

REMARKS/ARGUMENTS

Applicants have Claims 1, 9, 13, 15-18 and 22-24 and have amended the specification to included limitations from originally filed claims. No new matter was added by these amendments. Claims 1-5, 9, 10 and 13-24 remain in this application. Applicants request reconsideration of this application in view of the above amendments and these remarks and arguments.

Allowable Subject Matter

The Examiner has allowed Claims 1-5 and 10; states that Claims 9 and 23 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §112 (which applicants have done); and states that Claims 13-22 would be allowable is amended to overcome the rejections under 35 U.S.C. §112 (which applicants have done).

Claim Objections

The Examiner has objected to Claims 1, 13, 17 and 24 stating that in lines 1-2 of each claim, the phrase “an air interface comprising a plurality of bursts, a method” should be “an air interface, a method”. Applicants have amended Claims 1, 13, 17 and 24 as suggested by the Examiner to overcome these objections. Therefore, Applicants request that the Examiner remove these objections to Claims 1, 13, 17 and 24.

The Examiner has objected to Claim 15 as including language that is redundant to what is included in Claim 13, from which Claim 15 depends. Applicants have redrafted Claim 15 into an independent claim, wherein the revised Claim 15 overcomes these objections by the Examiner. Applicants accordingly request that the Examiner remove these objections to Claim 15.

The Examiner has objected to Claim 16 stating that “the operating mode is the expectation” should be “the operating mode is based on the expectation”. Applicants have amended Claim 16 as suggested by the Examiner to overcome this objection. Therefore, Applicants request that the Examiner remove the objection to Claim 19.

Claim Rejections – 35 USC § 112

The Examiner has rejected Claims 9 and 13-23 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the Examiner has rejected Claim 9 stating that it recites the limitation “the link control signaling” in line 1, and that there is insufficient antecedent basis for this limitation in the claim. Applicants have amended Claim 9, to depend from Claim 4 instead of Claim 1, thereby, rendering moot the Examiner’s §112 rejection of Claim 9.

The Examiner has rejected Claims 13, 15, 17 and 22 stating that the term “substantially similar” in these claims is a relative term, which renders the claims indefinite. Applicants has amended the language “is substantially similar to” to simply read “matches” thereby rendering moot the Examiner’s rejections to Claims 13, 15, 17 and 22.

The Examiner has further rejected Claim 15 stating that it directly contradicts language in Claim 13, from which it depends. Applicants have amended Claim 15 in accordance with the Examiner’s suggested amendments, wherein Claim 15 is now independent and includes the “receiving”, “determining” and “identifying” steps from Claim 13 (and any other non-conflicting limitations), thereby, rendering moot the Examiner’s §112 rejection to Claim 15. These amendments also address the Examiner’s objections to Claim 15 as stated above.

The Examiner has rejected Claim 18 stating that it recites a protocol that renders the claim indefinite because it can change over time. Applicants have amended Claim 18 in accordance with the Examiner’s suggested amendments of limiting the protocol to a particular point in time (in this case 2003), thereby, rendering moot the Examiner’s rejection of Claim 18.

The Examiner has rejected to Claim 23 suggesting that it broadens the scope of Claim 1, from which it depends, instead of narrowing the scope. Applicants have rewritten

Claim 23 to be an independent claim that includes all of the limitations of Claim 1 (except those redundant limitations), thereby, rendering moot the Examiner's rejection of Claim 23.

Claim Rejections – 35 USC § 103

The Examiner has rejected Claim 24 under 35 U.S.C. 103(a) as being unpatentable over Smith, et al. (USPN 6,714,557) in view of Oliver (USPN 6,292,484) in further view of Cantoni, et al. (USPN RE37,494). Applicants traverse these rejections.

To establish a *prima facie* case of obviousness, and hence to find Claim 24 unpatentable under 35 U.S.C. § 103(a) over the combination of Smith, et al., Oliver and Cantoni, et al., three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not be based upon applicant's disclosure. MPEP at §2142. In the present case, all three criteria are not met because the combined teachings of Smith, et al., Oliver and Cantoni, et al. references do not teach or suggest all of the claim limitations of Claim 24.

The embodiment of the invention recited in Claim 24 is a method defining a plurality of bursts. In accordance with the method, "*each burst [within the plurality] comprises a field embedded within a fixed location in the burst; and wherein the field is one of a synchronization field and a signaling field*". Moreover, "*when the field is a signaling field, defining an indicator to identify that payload in the burst either a) begins a new packet, completes a packet, or signals a segment of a packet that does not begin a packet or b) identifies a second type of information*". Thus, in accordance with the quoted limitations of Claim 24 (as read in light of the teachings in the specification), each burst in a plurality of bursts includes a field and this single field is one of a synchronization field or a signaling field *but not both*, and when the field is a signaling field it defines an indicator to identify

various elements as listed in Claim 24. Applicants respectfully submit that the combined teachings of Smith, et al., Oliver and Cantoni are missing at least a portion of the above-quoted limitations of Claim 24, as argued in detail below.

Turning first to the primary reference cited by the Examiner, Smith, et al., the Examiner claims that this reference discloses “*each burst [within the plurality] comprises a field embedded . . . in the burst; and wherein the field is one of a synchronization field and a signaling field*”. Applicants disagree. Smith, et al. discloses a method of packet concatenation in TDMA transmissions that enables additional data to be transmitted in some time slots than would be possible without the invention (Abstract; col. 1, lines 6-10). Smith, et al. explains that usually each time slot includes “overhead information” (i.e., symbols or free time) that uses up a substantial number of predetermined symbols (nearly 25%) in a fixed length time slot, which cannot be used for transmitting data (col. 1, lines 50-57). The invention disclosed in Smith, et al. provides for the elimination of some or all of the overhead information in some of a plurality of time slots and instead transmits data during the time that the overhead data would have been transmitted (col. 2, lines 52-61).

The Examiner argues that the field in Smith, et al. that is either a synchronization field (preamble) or a signaling field (other fields), as claimed in Claim 24, is overhead and that the time slot is the burst as is claimed in Claim 24. Applicants first state that the overhead disclosed in Smith, et al. is not a single field but is “information” (col. 3, lines 3-6) that may be included in a plurality of fields, such as a Beam Settling field 108, a Guard Time field 110 and a Preamble field 114 (FIG. 2). However, even considering *arguendo* that overhead information is a field in a single time slot, where there are a plurality of time slots called a “concatenated packet” (e.g., 202, 204, 206, 206) the first time slot (202) always includes both the preamble (which the Examiner says is synchronization) and the other fields (which the Examiner says is the signaling), and some of the time slots (204, 206) include no overhead at all. This is different from what is required of the plurality of bursts recited in Claim 24, wherein *each burst in the plurality* comprises a field that is one of either a synchronization field or a signaling field.

Moreover, the Examiner does not point to where in Smith, et al. is disclosed that this single field is “in a fixed location” in the time slot, as is required from Claim 24, leading to missing limitations from the combined teachings of Smith, et al., Oliver and Cantoni, et al. In fact, these limitations cannot exist in Smith, et al. since this reference discloses that the field (overhead) is missing in some of the time slots and is, therefore, not in any location in such time slots, let alone a fixed location in the time slot. In addition, where only a portion of the overhead is missing, the overhead is still not in a fixed location because the data then spills over into the boundary of where the overhead used to be, thereby, varying the location of the overhead.

The Examiner concedes that the combined teachings of Smith, et al. and Oliver do not teach the limitations recited in Claim 24 of “when the field is a signaling field, defining an indicator to identify that payload in the burst either a) begins a new packet, completes a packet, or signals a segment of a packet that does not begin or complete a packet” but argues that Cantoni recites these limitations. However, Cantoni does not disclose that the indicator that identifies payload is defined in a single field that could be embodied as a synchronization field in some bursts and a signaling field in other bursts within a plurality of bursts. Moreover, the Examiner fails to point to where in Cantoni (or any other reference) the limitations that the indicator “or b) identifies a second type of information” are disclosed, leading to yet additional missing limitations from the combined teachings of Smith, et al., Oliver and Cantoni, et al.

Since limitations are missing from the combined teachings of Smith, et al., Oliver and Cantoni, et al., Applicants request that the Examiner remove the 103(a) rejections to Claim 24 and allow this claim.

The Applicants believe that the subject application, as amended, is in condition for allowance. Such action is earnestly solicited by the Applicants.

In the event that the Examiner deems the present application non-allowable, it is requested that the Examiner telephone the Applicant’s attorney at the number indicated

below so that the prosecution of the present case may be advanced by the clarification of any continuing rejection.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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